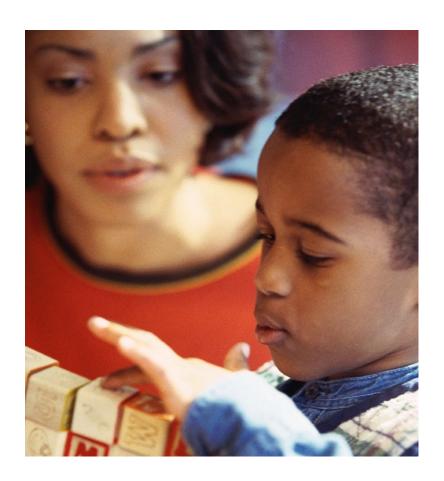


The Human Services Workforce Initiative

The Early Care and Education Teaching Workforce: At the Fulcrum



Prepared by National Center for Children & Families for Cornerstones for Kids

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THE EARLY CARE AND EDUCATION TEACHING WORKFORCE: AT THE FULCRUM

Summary Report

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November 2006



ACKNOWLEDGEMENTS

This document would not have been created without the support and engagement of many talented and dedicated individuals. First, we give thanks for intellectual and financial support from Cornerstones for Kids and Ira Cutler: given their urging and their conceptualization of a human services workforce writ large, we were encouraged to think about the early care and education workforce within an atypically broad context. As a result, we have aimed to provide a report with a fresh slant—one that situates workforce challenges at the intersection of systemic thinking, workforce effectiveness data, and a consolidated typology of current strategies. Using this framework, the report also renders recommendations about what steps could and should be taken to improve the early care and education teaching workforce.

We are also extremely grateful to our Advisory Committee, a group of stellar scholars and thinkers who guided us at every turn. Bright, dedicated, knowledgeable individuals, as a group they were potent in advancing our thinking and the content of this report; we thank them all: Nancy Folbre, Carollee Howes, Sue Russell, Louise Stoney, Marcy Whitebook, Dan Bellm, Marci Young, and Martha Zaslow. While we acknowledge their support and input, and that of Cornerstones for Kids, the findings and conclusions presented in this report are those of the authors; we alone bear the burden of errors, omissions, and misinterpretations.

Finally, we wish to dedicate this work to the scores of wonderful individuals who work with young children daily; their commitment and efforts do nothing less than shape the future of our nation. It is our hope that this work will directly benefit them and the children and families they serve.

THE EARLY CARE AND EDUCATION TEACHING WORKFORCE: AT THE FULCRUM

Cornerstones for Kids Introduction

The Human Services Workforce Initiative (HSWI) is focused on the frontline workers serving vulnerable children and families. HSWI's premise is that human services matter. Delivered well, they can, and do, positively impact the lives of vulnerable children and families, often at critical points in their lives.

We believe that the quality of the frontline worker influences the effectiveness of services they deliver to children and families. If workers are well-trained and supported, have access to the resources that they need, possess a reasonable workload and are valued by their employers, it follows that they will be able to effectively perform their jobs. If, however, they are as vulnerable as the children and families that they serve, they will be ineffective in improving outcomes for children and families.

Unfortunately, all indications today are that our frontline human services workforce is struggling. In some instances poor compensation contributes to excessive turnover; in others an unreasonable workload and endless paperwork renders otherwise capable staff ineffective; and keeping morale up is difficult in the human services fields and it is remarkable that so many human services professionals stick to it, year after year.

HSWI's mission is to work with others to raise the visibility of, and sense of urgency about, workforce issues. Through a series of publications and other communications efforts we hope to:

- Call greater attention to workforce issues.
- Help to describe and define the status of the human services workforce.
- Disseminate data on current conditions.
- Highlight best and promising practices.
- Suggest systemic and policy actions which can make a deep, long term difference.

In this summary paper Sharon Lynn Kagan and her colleagues at the Teachers College, Columbia University, focus on the nearly five million individuals who have the responsibility of caring for and educating the nearly two-thirds of America's children under the age of 5 who spend time in non-parental care. The paper describes what is known about this workforce and calls for a series of bold changes that would transform the early care and education workforce.

A more complete version of this work will published by the Teacher's College in book form in 2007.

Additional information on the human services workforce, and on HSWI, is available at www.cornerstones4kids.org.

Cornerstones for Kids, 2006

Fulcrum: the part that serves as the hinge or support; the support that supplies the capability for action.

It has long been noted that the quality of any institution—be it a world-renowned university, Fortune 500 corporation, or non-profit organization—hinges on one factor: the quality of its workforce. This is especially true in early care and education (ECE), where quality and outcomes are highly contingent on personal interactions between ECE teachers and young children. But all is not well for ECE teachers. The ECE teaching workforce is characterized by low and inconsistent qualifications, inadequate professional development opportunities, low compensation, and high turnover. The result is that too many children are not receiving the high-quality services necessary for their complete and healthy development. In essence, the learning opportunities that the early years afford are being squandered. Despite the earnest efforts of policymakers, researchers, teachers, and advocates to redress the situation, pervasive challenges persist.

WHAT CAUSES THESE CHALLENGES?

Nested in the American federalist, anti-regulatory context, ECE is an uncoordinated mélange of arrangements that crisscross the public and private sectors at federal, state, and local levels. Unlike public education, with which ECE is often compared, American ECE functions as a market. Public sector investments are highly dispersed; for example, Head Start, the country's best known and most comprehensive early learning program for low-income children and families, is funded federally and administered locally. Also funded federally, the Child Care and Development Fund is state-administered. Beyond federal investments, states support their own pre-kindergarten programs that are locally administered. Add to this a bevy of community-based, privately owned, and non-profit programs and the market nature of American ECE becomes clear.

While many markets function effectively, some—including ECE—are characterized by market failure. Lacking an infrastructure to advance quality, American ECE is hampered by imperfect information, unlimited personnel supply, and market deregulation, rendering it fragile and highly vulnerable to unpredictable market variations. Together, these conditions yield a non-system of services for young children that is low in quality, fragmented, inefficient, and seriously compromised by searing workforce inequities—a sad reality that will become abundantly clear as we look at the characteristics of contemporary ECE teachers.

WHAT DOES THE CONTEMPORARY ECE TEACHING WORKFORCE LOOK LIKE?

Nearly five million individuals have the responsibility of caring for and educating the nearly two thirds of America's children under the age of 5 who spend time in non-parental care [1, 2]. Although the adults who provide these services do so in a diverse array of settings (e.g.,

Head Start, public and private community-based child care centers, school-based pre-kindergarten programs, and home-based settings), their responsibilities are similar: to protect, nurture, and foster children's optimal growth and development. Their responsibilities are also complex: to weigh educational theory and practice while balancing the needs of children, families, and communities each and every day. Finally, their responsibilities are significant: to work with children during the years when learning and development are most rapid and formative. Early childhood is the crucial period when positive interactions with adults can have the most impact on children's lifelong outcomes [3]. For these reasons, the nature and quality of the early childhood workforce is of paramount concern to parents, families, community leaders, and policymakers.

Definition of Terms

One of the critical challenges facing any analysis of the ECE workforce is imprecision in the way terms are used. To avoid confusion, we provide a set of working terms used in this report.

<u>Early Care and Education</u> is a term that embraces different types of programs, all of which share the goal of nurturing young children's development, growth, and learning.

<u>Center-based Programs</u> may be publicly and/or privately supported. They include Head Start, state-funded pre-kindergarten programs, nursery schools, and child care programs. They may be housed in schools, nursery schools, child care centers, or community/religious settings.

<u>Family Child Care</u> takes place in a home and is usually licensed by a state's child care regulatory entity, although states vary tremendously in the stringency and scope of their regulations.

<u>Family, Friend, and Neighbor Care</u> includes unregulated and often legally-exempt care provided either in the child's or the caregiver's home. Elsewhere, this type of service has been called informal care, kith and kin care, or license-exempt child care.

<u>Teacher/s or the Teaching Workforce</u>, as used herein, includes all personnel whose primary role is to provide direct *instructional* services for children. Included in this category are lead teachers, assistant teachers, aides, FCC providers, and FFN caregivers.

<u>ECE Workforce</u> describes those who carry out both instructional and non-instructional roles in ECE settings. Thus, the term workforce is an inclusive one that embraces teachers; others who work in ECE settings and whose primary responsibility is not instructional (e.g., administrators); and individuals who work in settings that support ECE (e.g., resource and referral coordinators).

When looking at the characteristics of the ECE teaching workforce, many already well-known and well-documented patterns emerge. ECE teachers, those who have the responsibility to care for and instruct young children, are predominantly white women in their late 30s and early 40s. Most ECE teachers have at least an associate's degree and earn salaries that are extremely low compared to those of individuals with similar qualifications in other fields. Because teachers are compensated so poorly, it is not surprising that the ECE workforce is plagued by turnover; at 30% [4], the annual ECE turnover rate stands in stark contrast to the 16% among K-12 teachers [5]. A closer look, however, reveals that these patterns are not consistent across the entire workforce.

Great diversity of program settings, for example, complicates the ECE workforce picture. Data indicate that one quarter of teachers work in

Definition of Terms

<u>Teacher Turnover</u> includes *job turnover*, which refers to teachers who leave their teaching positions but elect to stay in the field, and o*ccupational* turnover, which refers to teachers leaving the field, either to enter another field or to retire.

<u>Teacher Quality</u> refers to an adult's demonstrated competence in working with young children.

<u>Teacher Effectiveness</u> refers to the impact that teachers have on improving the outcomes of the children with whom they work. Teacher effectiveness, therefore, is a combination of what teachers do and the outcomes their children achieve, controlled for children's beginning basic skills.

<u>Professional Development</u> is an umbrella term to describe the formal education, training, and credentialing that ECE teachers pursue to enhance their skills.

<u>Formal Education</u> refers to credit-bearing coursework provided in an accredited educational institution, including 2- and 4-year colleges, and universities. Formal education may or may not include studies related to child development and early education; when it does, it is referred to as *formal education with ECE content*.

<u>Training</u> includes all educational activities that take place outside of the formal education system. *Specialized training* refers to training in topics directly related to child development and early education.

<u>Credentials</u> document the qualifications and skills an individual possesses to carry out a given role. They attest to the fact that an individual has received the requisite formal education and/or training to perform an employment function.

center-based settings, another quarter work in family child care homes, and roughly one half are relatives and non-relatives who care for children in homes [1]. Turning to the different types of programs that comprise the ECE system, a national study of center-based programs found that 29% of child care centers are for-profit programs, 22% are affiliated with a religious organization, 25% are independent non-profit programs or are run by a public agency, 16% are public school-based, and 8% are Head Start programs [6]. As the data reveal, the ECE teaching

workforce can be found in a multitude of programs. Not surprisingly, there is significant variation in teachers' characteristics across different program types.

Further, ECE teachers' professional development—formal education, training, and credentials—varies considerably. One component of professional development, formal education, refers to credit-bearing coursework provided by accredited educational institutions that usually leads to a degree. Formal education is most often reported from two perspectives: (i) the degrees held by teachers across the ECE field, and (ii) the degrees held by teachers in particular ECE positions or settings. Regarding the first, the data vary, indicating that between one fifth and one half of ECE teachers hold bachelor's or advanced graduate degrees [6-10]. Associate's degrees are held by one fifth to nearly one half, and about one fifth hold a high school degree. From the second perspective, there is agreement that more individuals in higher level positions hold higher level degrees. For example, among lead teachers, 33% hold a bachelor's degree or more while only 20% hold a high school degree or less [7]. In contrast, among assistant teachers, only 12% hold the bachelor's degree and 43% have a high school degree or less. Variation, however, exists among program types, as well. For example, prekindergarten teachers have completed substantially higher levels of formal education, with 73% having a bachelor's degree or more [11], in comparison to Head Start, where 36% hold bachelor's degrees or more [12], and family child care, where 11% hold bachelor's degrees or more [8].

Training, a second component of professional development, also varies dramatically by program type and by state. One three-state study, for example, noted that Head Start teachers participate in the most training of the ECE workforce: 62 hours of training per year compared to 45 hours for teachers in pre-kindergarten and 27 hours for teachers in child care programs [13]. A four-state study found that, on average, FCC providers participate in 19 hours of training and FFN caregivers participate in 16 hours of training annually [14].

Finally, credentials, which attest to program and teacher competencies, reveal large inconsistencies, as well: 57% of teachers in pre-kindergarten programs are certified by their states, and 23% have the Child Development Associate (CDA) credential [11]. In Head Start programs, 22% of teachers have a CDA [12]. Approximately one fifth of teachers in center-based programs have a CDA, while almost half have a state endorsement or certificate [6]. Among FCC providers, 3% have a CDA and another 7% have a state endorsement or certificate

[15]. While better educated than many believe, the ECE teaching workforce is characterized by striking variation in its formal education, training, and credentialing, with program type and state requirements largely predicting such variation.

Given the tremendous diversity in teachers' professional development, it is not surprising that ECE teachers' compensation (defined as wages and benefits) varies as well. ECE teachers in state-funded pre-kindergarten programs earn on average \$30,998 per year, 89% receive health insurance, and 80% have retirement benefits [11]. State funded pre-kindergarten programs compensate teachers more generously than other types of ECE programs; yet, even in these programs, compensation is substantially inferior to that in K-12 schools, where teachers earn an average of \$45,250 annually and have health and retirement benefits [16]. Head Start teachers have an average annual salary of \$24,608, and more than half of Head Start teachers receive health insurance and retirement benefits [12]. When dividing the ECE workforce into "preschool teachers" and "child care workers," stark wage differences appear; preschool teachers earn an average \$24,560 per year, while child care workers earn approximately \$18,060 [17]. Child care teachers' compensation is further depressed because only 28% of the child care workforce has employer-provided health insurance. The level of compensation is worse for FCC providers. For instance, FCC providers in four Midwestern states earned just \$12,740 in 2003 [14]. FFN caregivers earn even less. In those same four states, FFN caregivers earned \$7,920 [14], and research suggests that almost half of FFN caregivers are unpaid [18]. Across these data two important conclusions emerge. First, ECE teachers' compensation packages are inadequate, with many ECE teachers living close to the poverty level; second, as noted, wide variation in compensation exists across various ECE program types.

WHAT FACTORS MAKE ECE TEACHERS EFFECTIVE?

Research examines the success of the ECE teaching workforce in two ways: teacher quality and teacher effectiveness. Teacher quality refers to an adult's demonstrated competence in working with young children, while teacher effectiveness refers to the impact teachers have on young children's development. To measure teacher effectiveness, we need information on both teacher practices and child outcomes, along with evidence that they are related. Because of the difficulty of making a causal link between the teachers' actions and children's development, the majority of the research on the ECE teaching workforce measures teacher quality.

Most evidence points to three primary factors that are positively associated with teacher quality. First, teachers' participation in professional development, especially formal education, is often related to teacher quality. Indeed, the preponderance of research shows that teachers who participate in formal education and training tend to have higher quality classrooms and higher quality interactions with children, with some data suggesting that a bachelor's degree will lead to optimal teacher behavior [19-21]. Findings from a study of pre-kindergarten teachers suggest, however, that teachers' level of education is only marginally correlated with teacher quality and is not correlated with children's developmental outcomes [22]. Thus, while the data on the importance of a bachelor's degree, in particular, remains equivocal, more professional development is consistently regarded as highly desirable and highly relevant to quality teaching.

Second, some studies suggest that teachers' compensation is the strongest predictor of classroom quality in child care centers—stronger than any other structural indicator at either the center or the classroom level [23-25]. Teachers who are poorly paid tend to work in lower-quality programs that provide a poorer educational experience for children. Conversely, teachers with high earnings and sufficient benefits, particularly health insurance and pension plans, are more likely to stay in their positions [26].

Stability is the third significant determinant of teacher quality and, as applied to the ECE teaching workforce, encompasses both program tenure and turnover [24, 26, 27]. Program tenure refers to how long a teacher continues working in the same program. Turnover refers to the rate at which teachers leave their programs to take a new position within the ECE field or leave the field to retire or to enter a new field of work. Low rates of teacher turnover are consistently associated with positive teaching practices. Although a smaller research base investigates teacher effectiveness by looking at the relationship between teachers' practices and children's outcomes, findings from this research corroborate the importance of teachers' formal education, training, and stability [28].

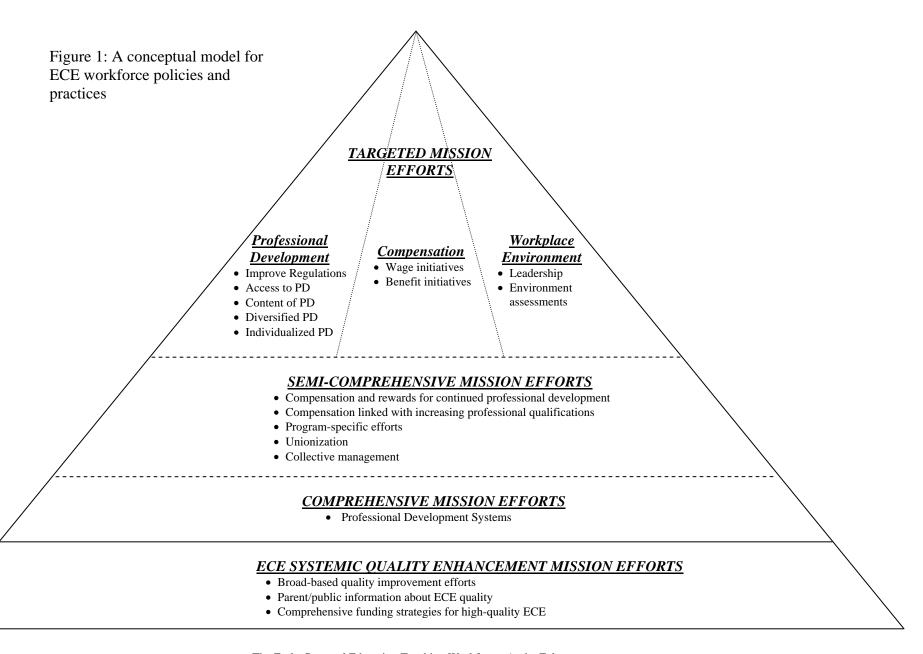
In addition to education, training, and turnover, it is important to consider teachers' beliefs and psychological wellbeing to understand ECE teacher quality. It is clear from the research that teachers' beliefs are related to their daily practice as well as their ability to incorporate new educational practices [29]. Teachers' psychological wellbeing also contributes to the quality of children's early care and education. Indeed, some research has shown that teachers who reported higher levels of depressive symptoms were rated by observers as being less sensitive and more withdrawn than teachers reporting lower levels of depressive symptoms; they also tended to spend less time engaged with children [30]. Furthermore, higher levels of

depression are also positively associated with teachers' decisions to leave the field [10]. Thus, the effect that depression has on turnover suggests that depression is likely to have both a direct and indirect impact on the quality of care that children receive and, consequently, on their development.

While research on some predictors of effectiveness remain inconclusive, in part because critical variables like formal education and salary tend to be correlated, high levels of professional development, compensation, and stability positively and meaningfully contribute to teacher quality. Although more data are badly needed on the predictors of teacher effectiveness, efforts to support the ECE workforce that concentrate on these factors are likely to be highly beneficial.

WHAT'S CURRENTLY GOING ON TO SUPPORT ECE TEACHERS?

A wide range of innovative national, state, and local policies are currently aimed at improving the quality and effectiveness of the ECE teaching workforce. Because of the sheer number and diversity of these efforts, this analysis uses a mission-driven typology to classify efforts by their intent. The typology suggests that current efforts can be grouped into four distinct categories or tiers, distinguished by their mission or primary intentions (see below). Pictorially, the typology can be represented in a pyramid divided into four horizontal tiers. The most narrowly focused policies and practices—those that have a singular goal focused on a specific workforce variable—are at the top of the pyramid. The second tier contains those policies and practices that strive to achieve more than one goal through a somewhat broader mission. The third tier is comprised of broad-based, comprehensive efforts intended to enrich the many facets of the ECE teaching workforce. Finally, the fourth tier includes those efforts that have the broadest missions, addressing and extending beyond the ECE workforce.



Tier One: Targeted-Mission Efforts

In the first tier, we consider efforts that have the most "targeted" or specific mission. Our designation of efforts as having narrow or targeted missions is a descriptive endeavor, not an evaluative one. Rich in texture and depth, these first tier efforts can be divided into three types: (a) efforts that focus on enhancing professional development; (b) efforts that seek to increase compensation; and (c) efforts that improve teachers' workplace environments.

To improve professional development, policymakers have bolstered regulations by raising entry requirements and ongoing requirements; improved ECE teachers' access to professional development (e.g., through financial assistance); enhanced the content of training and formal education available to ECE teachers; and provided teachers with individualized professional development in the context of the classroom (e.g., coaching). Another set of current targeted efforts focuses on teacher compensation through wage and health insurance initiatives. Lastly, some targeted mission efforts focus on upgrading teachers' workplace environments by enhancing the skills of leaders, as well as assessing and then improving the workplace.

Promising Policies in Action

Professional Development:

Examining the Content of Formal Education and Specialized Training

ECE professional organizations are currently examining the content and quality of ECE teacher preparation programs at 2- and 4-year colleges and universities. From a national perspective, variations in teacher preparation programs across the country raise concerns about the quality and consistency of instruction in higher education programs. To ensure that institutions of higher education (IHEs) provide high-quality education that incorporates elements of both practice *and* content knowledge, the National Association for the Education of Young Children (NAEYC) and The National Council for the Accreditation of Teacher Education (NCATE) developed five standards for ECE teacher preparation programs [31]:

- Standard 1. Promoting Child Development and Learning
- Standard 2. Building Family and Community Relationships
- Standard 3. Observing, Documenting, and Assessing to Support Young Children and Families
- Standard 4. Teaching and Learning
- Standard 5. Becoming a Professional

Two- and 4-year colleges and universities that implement these standards in their early childhood programs help ensure that students receive comprehensive content area coursework and field experience. Currently, 150 NCATE-accredited IHEs across the country offer NAEYC-approved advanced degrees [31].

Similar efforts are underway to improve the quality of specialized training in which teachers participate. Specialized training serves as an important step in teachers' paths toward increased formal education and they appear to be an important elixir of quality in ECE. Yet, little is known about the nature of these services. For example, there have been few systematic studies of the extent to which such training considers methods of adult learning (e.g., that it should be "intensive, continuous, and individualized") [29, p. 275]. To improve the quality of specialized training, the National Association of Child Care Resource and Referral Agencies (NACCRRA) is currently developing quality standards for training provided by Child Care Resource and Referral Agencies (CCR&Rs) throughout the country. These standards will establish a trainer credential, educate trainers to use approved techniques that resonate with how teachers learn, and facilitate the analysis of the content of training. In addition to this training approval system, NACCRRA is establishing criteria to assure that CCR&Rs across the country offer high-quality specialized training and follow best practices for technical assistance. NACCRA will recognize CCR&Rs that meet the criteria through an accreditation process [32].

Indeed, numerous targeted efforts across the country support professional development, compensation, and workplace enhancement. While data show that these approaches can be effective, they also show that the policies and practices are varied and often limited to particular sectors or sub-populations of the ECE teaching workforce. Such variation leads to considerable inequality of opportunity and experience for ECE teachers. Being an ECE teacher in San Francisco, for instance, where there is a mentorship program and a compensation initiative, provides more promising career opportunities than being an ECE teacher in many other states and localities where such programs do not exist. Similarly, teachers in pre-kindergarten programs have considerably different levels of compensation and professional qualifications than their counterparts in private child care programs. These inconsistencies in workforce opportunities perpetuate troublesome inequalities in the programs and services offered to children.

In order to rectify the inequality of opportunities and take promising policies and practices to scale, evaluations must provide meaningful information about how the efforts impact teacher effectiveness and children's outcomes. Where they exist, current evaluations typically focus on the implementation of policies and practices or on the impact they have on teacher quality. As a result, there is little evidence that any particular policy or practice improves children's development and learning, and therefore little justification for replicating certain promising programs.

Lastly, while targeted-mission efforts are one of many types of policies and practices that improve teacher quality, no targeted-mission policy or practice operates entirely in isolation. There are important interconnections between professional development, compensation, and

workplace environment efforts. Policies that call for the implementation of multiple strategies intentionally and concurrently are addressed by efforts in the second tier of our pyramid.

Tier Two: Semi-Comprehensive Mission Efforts

The second tier of the pyramid includes efforts with "semi-comprehensive" missions; in general, these are policies or practices that seek to achieve multiple goals concurrently. These efforts are based on the premise that the challenges facing ECE teachers are highly inter-related and, therefore, multifaceted solutions are the most desirable. This "semi-comprehensive mission" tier includes efforts that, for example, aim to improve teachers' educational attainment and compensation and stability. These efforts typically incentivize professional development since policymakers know that wage supplements are tied to higher levels of ECE teacher quality. Also in this tier are program-specific efforts, such as the Department of Defense's Military Child Care and Head Start, that not only provide incentives for ECE teachers to improve their professional qualifications, but also offer higher compensation in return for those improvements. Lastly, we include collective management and unionization in the second tier because teachers can access professional development opportunities and greater compensation through these strategies.

Promising Policies in Action

Compensation and Rewards for Continued Professional Development

The Teacher Education and Compensation Helps (T.E.A.C.H.) Early Childhood® Project is the most widespread program to enhance the formal education and compensation of ECE teachers in center-based care facilities and licensed FCC homes. The model requires support from the state (usually in the form of program administration and funding), the ECE employer (usually in the form of workplace flexibility and funding), and the ECE teacher (in the form of dedication to the program of study and to the ECE workplace). T.E.A.C.H. Early Childhood® was developed in North Carolina by the Child Care Services Association (CCSA) in 1990 and 22 states have since adopted the model [33, 34]. As a result of this unique initiative, more than 80,000 early childhood teachers, directors, and family child care providers nationally have been given the opportunity to access educational experiences [33]. There are four components of the program:

- 1. *Scholarship*. The scholarship usually covers partial costs for tuition and books or assessment fees. Often, while states or private foundations pay for the scholarship, the ECE employer is required to provide the scholarship recipient with paid release time and a travel stipend.
- 2. *Education*. In return for receiving a scholarship, each participant must complete a specified amount of education, usually in the form of college coursework, during a prescribed contract period.

- 3. *Compensation*. At the end of their contract, after completing their educational requirement, participants are eligible to receive increased compensation in the form of a one-time bonus (ranging from \$100 to \$700) or an on-going pay raise (4% or 5%), usually paid by the ECE employer.
- 4. *Commitment*. Participants must honor their commitment to stay in their current ECE setting or the field for six months to one year, depending on the scholarship program.

Evaluations of North Carolina's T.E.A.C.H. Early Childhood® program found that the program met its goals of raising participating teachers' formal education, compensation, and retention [34]. Evaluations of T.E.A.C.H. Early Childhood® Wisconsin confirmed North Carolina's findings. Project participants have much lower rates of turnover (12%) than the annual turnover rates for Wisconsin's ECE teachers in general (40%) [35]. Wage increases for recipients also exceeded average wage increases for ECE teachers across Wisconsin. Yet, it is important to note that since participation in T.E.A.C.H. Early Childhood® is voluntary, participants are more likely to be motivated and committed to their work than the general ECE teaching population. That said, these evaluations indicate that T.E.A.C.H. Early Childhood® can produce very positive results.

As of June 2006, semi-comprehensive mission efforts that supplement teachers wages for having higher levels of professional development, like T.E.A.C.H. Early Childhood®, existed in 27 states [36]. Among second tier efforts, several major ECE programs systematically support ECE teacher quality by raising teacher requirements above child care regulations, offering ongoing professional development opportunities, and compensating teachers who have attained higher levels of education. Yet, existing semi-comprehensive efforts are limited to certain programs in the field or to ECE teachers in certain states. Thus, we have ample examples of strategies currently supporting *some* ECE teachers that could be scaled up to support *all* ECE teachers.

Fortunately, we have evaluations for some of these efforts indicating that semi-comprehensive interventions show promise. ECE teachers who participate in these efforts attain higher levels of professional development and receive greater compensation. ECE programs benefit by having more qualified and stable employees [37]. Much of this research, however, stops short of evaluating teacher effectiveness. Assessing the impact of these semi-comprehensive efforts on children's learning and development would bolster the case for their expansion. In addition, an examination of these efforts vis-à-vis all ECE sectors and components of professional development systems (to be discussed below) is warranted to ensure that semi-comprehensive efforts unify, and do not further splinter, the teaching workforce.

Tier Three: Comprehensive Mission Efforts

Because isolated acts of improvement—even those with multiple missions—will not elevate the quality or effectiveness of the total ECE workforce, a set of "comprehensive" efforts have emerged. Categorized as tier three of our typology, these comprehensive efforts affect all teachers and focus on developing coordinated policies and practices, typically through the establishment of a professional development system (PDS).

Currently, 38 states are developing PDSs [15]. Despite the prevalence of PDS efforts, no two states are alike in their approach to this work. They are alike, however, in that few states have achieved a fully functioning professional development system. In large part, this is because PDS efforts have very broad goals and these efforts are constantly evolving as the ECE landscape changes.

To support states in creating comprehensive PDSs, the National Child Care Information Center (NCCIC) identified "Elements of a Professional Development System for Early Care and Education: A Simplified Framework and Definitions." This framework outlines five elements of a PDS: (1) access and outreach, (2) qualifications and credentials, (3) quality assurances, (4) core knowledge, and (5) funding [36]. NCCIC also documents states' efforts within these five categories, noting that all 50 states have made some effort in one of these five broad categories and 21 states have policies and practices in all five areas. Others proffer alternate elements of a comprehensive PDS.

Kagan, Tarrant, and Berliner [38] identified ten elements that comprise a comprehensive professional development system, including: (1) core knowledge, (2) career path, (3) professional development delivery mechanism, (4) quality approval and assurance system, (5) qualifications and credentials, (6) incentives for professional development, (7) access and outreach, (8) financing, (9) governance, and (10) evaluation. Irrespective of which definition of PDS elements one espouses, three key features must be in place. First, all elements of the PDS must be conceptualized and constructed so that they reinforce one another. Second, the PDS cannot function alone; it must be nested within the broader ECE system. Finally, the PDS must address all sectors of the ECE teaching workforce.

Promising Policies in Action

Pennsylvania's Professional Development System

Pennsylvania has an exemplary PDS because, in addition to addressing all ten elements detailed above, it also reflects the three key features. PA Pathways, the organization that leads Pennsylvania's PDS, established the state's core knowledge (element 1), which constitutes the criteria upon which trainers are endorsed by the Training Quality Approval System (element 4). Together, the training approval process and core knowledge establish a framework for PA Pathways' professional development record (element 5), which documents teachers' professional development as they progress through the state's career ladder (element 2). When looking for professional development opportunities, PA Pathways facilitates access to professional development through an on-line training calendar and on-line system for training registration (element 7). In addition, Pennsylvania has a sophisticated professional development delivery mechanism (element 3) that includes provision of specialized training throughout the state and articulation agreements between many of the state's institutions of higher education that enable teachers to transfer credits from an associate's degree into a bachelor's degree program. Pennsylvania offers incentives for teachers to pursue specialized training and education through free training, training vouchers, T.E.A.C.H. Early Childhood® scholarships, and education and retention grants for programs that hire highly qualified teachers (element 6). Pennsylvania finances the professional development system through a combination of federal, state, and philanthropic funds (element 8), and it has developed Regional Keys, geographically dispersed organizations that govern, plan, and deliver training to meet the needs of ECE teachers in different areas of the state (element 9). Moreover, Pennsylvania has coordinated its PDS with the larger ECE system; for example, the same regional organizations govern and implement both the PDS and the state's quality rating system. Unlike many other states, Pennsylvania has evaluated its PDS and used the results of these evaluations to improve support for ECE teachers (element 10).

Considering professional development systems within the context of our overall conceptual model highlights the strengths and weaknesses of existing efforts. The strength of PDSs is that they build the infrastructure necessary to ensure that ECE teachers have access to high-quality specialized training and formal education. In addition, they tackle some of the most intransigent problems facing ECE teachers. Instead of an add-on program here or a one-time initiative there, PDSs represent systemic reform. They bridge gaps between 2- and 4-year colleges that have existed for decades. They provide options for people who have traditionally not had access to training. And, ideally, they assure that training and education are purposeful, content-rich, and linked to increasing levels of career recognition. As such, these efforts address populations, content, and institutions that have been neglected in decades of haphazard, uncoordinated, and uncredited training activities.

If, however, we expect PDSs to solve all of the problems facing ECE teachers, we will be disappointed. The need for evaluation data on PDSs is immense and the lack thereof is worrisome. States that want their PDSs to thrive recognize that they need to develop data collection mechanisms, impact evaluations, and cost analyses that address the comprehensive

scope of their efforts. To date, few PDSs seem to be evaluating their impact on the field or on the quality of classroom teaching. Finally, because of the multi-faceted and complex nature of PDSs, many are subject to fragmented and volatile funding, rendering vulnerable their systemic focus. As a result, they are slow to embark on the kind of massive changes their missions demand.

In sum, PDSs hold the potential for comprehensive support of ECE teachers. Yet, improving the entire workforce ultimately rests on the strength of the broader ECE system. To support ECE teachers fully and sustainably, we must reform early care and education. Therefore, we turn next to more systemic quality enhancement efforts.

Tier Four: ECE Systemic Quality Enhancement Mission Efforts

Fourth tier efforts reflect the reality that mission-driven efforts to improve the ECE workforce will fail unless they are encased in broader ECE reform. Tier four efforts, therefore, are central to the development of a viable ECE workforce. Broad-based quality improvement initiatives, such as program accreditation and quality rating systems, address teacher qualifications and competencies in addition to other features of program quality, such as childadult ratio and group size. Providing parents and the public with information about the importance of high quality early care and education and how to find it is another strategy to enhance the quality of the ECE system. However, given the extremely high cost of quality ECE, parents with the best information may be unable to pay for the care they desire. Therefore, comprehensive funding for high-quality ECE is an essential systemic quality enhancement effort. Several strategies provide families and programs with financial incentives for higher-quality ECE, including: (1) tiered child care subsidy reimbursement; (2) quality awards and grants; (3) tax credits for families who choose high quality care. Lastly, resources to fund quality ECE must be generated. Researchers have developed mechanisms to calculate the amount of funding needed to support a high quality ECE system, and revenue generation strategies have been proffered. Despite success in estimating the cost of ECE, however, engendering the will to finance high quality ECE remains a persistent challenge.

Promising Policies in Action

Quality Rating Systems

Many states have developed quality rating systems (QRSs) to induce ECE programs to improve their quality, including the quality of their teachers. QRSs are typically publicly supported efforts to gauge ECE program quality based on factors such as classroom quality assessments, staff qualifications, and administrative procedures. As of March 2006, 12 states and the District of Columbia, along with several communities throughout the country, had adopted QRSs [36], and more than 25 states are currently considering developing a QRS [39].

Not all QRSs are the same, however. The most comprehensive efforts cover center-based child care, family child care, after-school care, pre-kindergarten programs, and Head Start [40]; some states' efforts only embrace a few of these program types. One state makes participation in the QRS mandatory, while others offer it on a voluntary basis. Some states offer higher reimbursements through the child care subsidy system or other financial awards to participating ECE programs that provide higher-quality ECE. Some states establish a QRS in statute while others do so in agency regulations [40]. While each QRS has unique characteristics, they generally share three primary goals: (1) improving the overall quality of ECE programs, (2) raising public and consumer awareness about program quality, and (3) providing increased funding to encourage and reward programs that provide higher-quality ECE. Because teacher quality is central to program quality, each of these three goals directly and indirectly affects the ECE teaching workforce.

While we do not always consider broad and systemic efforts to reform ECE as efforts to improve its workforce, often they are. Broad quality improvement initiatives, parent information campaigns, and funding for high-quality programs can provide the foundation for an ECE system with highly qualified and well-compensated teachers. Specifically, our review shows that successful systemic quality enhancement initiatives rely on the infusion of substantial and sustainable funding into ECE programs. Without additional investments in ECE, then, quality improvement initiatives are unlikely to overcome ECE teachers' persistently low wages and low qualifications.

Given the fragmented nature of ECE, our review of current efforts also reveals that no single state and no single program type has a monopoly on workforce reform. Fortunately, this means that many promising efforts exist throughout the country; unfortunately, it means that teachers in different types of programs and in different states experience vastly different types of and approaches to reform. Our typological review shows that many current efforts focus on enhancing teachers' professional development, with less effort focused on teachers' compensation or work environments. To improve the ECE workforce, we argue that policies and practices should be developed in a systematic manner to address all issues facing ECE teachers.

TRANSFORMING THE ECE WORKFORCE: VISION AND RECOMMENDATIONS

Based on this review and our collective experience, it is our firm belief that improving the ECE teaching workforce requires more than merely tweaking what exists today; it requires more than merely increasing coordination and collaboration among existing programs and funding streams. It requires a radical transformation and a vision for the future. Therefore, we offer a declaration, unconstrained by today's realities, of what we want for ECE teachers of the future.

What is our vision for a transformed ECE Workforce?

In contrast to the current ECE workforce, we envision a transformed environment for the workforce of the future. Informed by research, best practices, and a moral sense of what ECE teachers and professionals deserve, we proffer the following bold vision.

ECE teachers in the future should expect:

- a unified, professionally agreed-upon understanding of the skills, knowledge, and degrees/certificates it takes to be a high quality ECE teacher;
- equal access to training and higher education linked to clear career paths, including opportunities for advancement and participation in management;
- a well-articulated, high-performing, customer-friendly higher education system with knowledgeable faculty and a comprehensive and appropriate curriculum built around the needs of children who are and will be enrolled in American ECE programs;
- financial and career supports, including universal access to comprehensive scholarships for higher education;
- fair and adequate compensation, including both earnings and benefits (health care and retirement), that brings ECE teachers' compensation to parity with that of comparably qualified K-12 teachers;
- engagement of the *entire* ECE workforce—including licensing professionals, resource and referral specialists, policy leaders, and other positions beyond the immediate delivery of services to children—in the transformation of the field;
- adequate investment of public money that establishes and sustains the federal, state, and local infrastructure necessary to support a high quality workforce; and
- supportive and inspiring workplaces that encourage communities of practice, reflective thinking, mentorship, and continued professional growth to all ECE teachers.

As a result of the transformed ECE workforce, American citizens and families should expect:

- a national call to provide the necessary investments that support the range and depth of skills and knowledge it takes to be an effective ECE teacher;
- a diverse ECE workforce that reflects the diversity of America's children and families;
- enough job stability among ECE teachers to increase continuity of care for children, but not so much to stagnate learning for the ECE teachers themselves;
- effective, respectful and culturally relevant early care and education that advances the full development and positive outcomes for all American children; and
- a society of young children who are well prepared to face the challenges of formal schooling and life in a global society.

Though not prescriptive, these statements suggest changes and reforms that must be pursued. For example, because this vision includes compensation for ECE teachers that is equivalent to that provided to K-12 teachers, any plan that falls short of achieving this goal is not ambitious enough. Similarly, any plan that allows different standards for training and professional qualifications for center-based and home-based child care, state-funded prekindergarten, and Head Start is not coherent enough. Therefore, keeping this vision at the forefront, we now turn to a set of recommendations that hold the promise of transforming the ECE teaching workforce.

What do we recommend for the future?

As we look to the future, supporting ECE teachers demands an ambitious research and policy agenda, comprised of both specific strategies targeted on workforce enhancement *and* broader strategies that advance system reform. These goals frame four targeted ECE workforce strategies: (1) systematize teacher qualifications to a common high-quality standard; (2) foster highly effective and consistent ECE teacher preparation and licensure; (3) render early childhood education equitable and viable; and (4) incentivize linkages between national and state workforce enhancement efforts. Each is described below.

ECE Targeted Workforce Strategies:

- **○** GOAL 1: Systematize All ECE Lead Teacher Entry Qualifications to a Common High-Quality Standard
- **○** *STRATEGY 1: National Credential and National Competency Assessment*

Given the incredible workforce disparities that exist among states and among programs within states, American ECE education is too idiosyncratic to render quality and equality for children. Consistency and quality control are needed as critical entry gates to the field. To both elevate and equalize entry requirements for ECE teachers across programs and across states, we recommend instituting a National Credential that *all* lead teachers in all ECE settings would need to possess in order to have primary responsibility for a group of young children. This National Credential would be awarded only after satisfactory performance on a new National Competency Assessment, which would measure competencies via observation as well as a written test. To qualify to take the National Competency Assessment, teachers may hold either a BA or an AA. In addition to the national credentialing of lead teachers, we recommend that every assistant-level teacher be required to hold a minimum of a Child Development Associate (CDA).

- **○** GOAL 2: Foster Highly Effective and Consistent ECE Teacher Preparation and Licensure
- **⇒** *STRATEGY 2: National ECE Teacher Education Compact*

To prepare high quality teachers who will qualify to pass the National Competency Assessment, ECE teacher preparation should be revamped. Only those institutions that can meet contemporary quality standards should be allowed to grant AA and BA degrees in early care and education. Comparable to a highly effective strategy launched in England, a National ECE Teacher Education Compact should be formed. The Compact would review the content requirements for effective ECE formal education, and it would certify only those institutions that can demonstrate capacity to deliver that level and depth of content. The Compact would monitor the capacity of such institutions over time, accrediting only those institutions that offered quality ECE preparation. The Compact would also define the competencies tested by the National Competency Assessment, administer the Assessment, and credential qualifying teachers. Finally, to ensure that the standards underlying teacher training and the Assessment are current, the Compact would either commission or carry out research directly related to the improvement of the standards and/or the processes associated with their achievement. It could be home to

teams of experts from diverse disciplines who would devote themselves to systemic study of key issues related to ECE teacher quality, teacher education, professional development institutions, training, and credentials.

In short, the Compact would be a national quasi-independent entity that serves as a pillar of systematic workforce enhancement by: (i) setting standards to accredit ECE teacher training institutions; (ii) accrediting only qualified teacher training institutions; (iii) setting standards for the National Competency Assessment; (iv) administering the National Competency Assessment; (v) credentialing teachers who pass the National Competency Assessment; and (vi) carrying out or commissioning research to improve the standards of ECE teaching and teacher training.

- **○** *GOAL 3: Render Early Childhood Education Equitable and Viable*
- STRATEGY 3: Establish Funding Mechanisms that Increase ECE Teachers' Compensation, Including Wages and Benefits

No other field of such importance to the future of the nation is so poorly compensated. Successful compensation initiatives must be generalized to reach *all* qualified ECE teachers. To boost ECE teachers' compensation to reach parity with that of K-12 teachers, both federal and state strategies are necessary. At the federal level we propose that ECE programs that meet quality criteria be awarded "Compensation Grants." This grant should be paid from a comprehensive federal fund comprised of both public sources (e.g., Child Care Development Fund, Title I) and private sources (e.g., endowment funds established by national foundations). At the state level, on-going mechanisms must be developed to support ECE teachers, much as they do now through their K-12 funding formulas. In addition to increased compensation, all qualified ECE teachers should be eligible for participation in TIAA-CREF. ECE teachers should also receive a comprehensive benefits package—including health insurance—commensurate with K-12 teachers. Scholarships to encourage adults to participate in professional development opportunities prior to and after licensure should be advanced. Moreover, loan forgiveness programs should be dramatically expanded and made available to all who earn higher credentials and pass the National Competency Assessment through federal loan forgiveness programs currently available to K-12 teachers.

- **○** GOAL 4: Incentivize Linkages between National and State Workforce Enhancement Efforts
- **⇒** *STRATEGY 4: Federally Fund Five State Demonstration Grants*

Given the impressive work being carried out in the states, existing efforts must be the bedrock of any revitalized national and state system of ECE workforce enhancement. Designed to link the recommended National Credential and the National Competency Assessment with state efforts that exist or are envisioned, five demonstration grants would be awarded on a competitive basis to states with proven competence in systemic reform. To be eligible to receive the annual \$2 million competitive grants that would be federally funded and awarded by the Compact, states would accept the national recommendations of this report and would work to implement them in conjunction with state-initiated workforce initiatives. The five states involved in the five-year demonstration effort would have the opportunity to share their work—accomplishments and challenges—with one another, solicit technical assistance, and disseminate their work broadly. The five efforts will serve as learning laboratories for the rest of the states, using a turnkey or mentoring model that would foster the implementation of these approaches in additional states throughout the nation.

Broader Strategies That Advance System Reform

The ECE workforce is encased in the ECE system, rendering the above workforce strategies necessary but insufficient. The following efforts are needed to complement the above targeted strategies: (5) achieve definitional clarity; (6) achieve conceptual clarity; (7) enhance the data and research base of the field; and (8) build public will for the development of an ECE system.

- **3** *GOAL 5: Achieve Definitional Clarity*
- **⇒** *STRATEGY 5: Convene a Working Group*

This analysis confirmed the well-acknowledged and highly problematic lack of definitional clarity around a number of key concepts that describe ECE (e.g., ECE itself, teacher, workforce, turnover, quality vs. effectiveness). Without such common definitions, confusion will continue to inhibit integrated understanding, research, and policymaking. For that reason, and to end decades of debate and confusion, we recommend that a working group of early

childhood experts be convened to create a common lexicon and establish system-wide definitions.

- **3** *GOAL 6: Achieve Conceptual Clarity*
- **○** STRATEGY 6: Establish a Short-term National Academy of Sciences Panel

Countless unresolved conceptual issues prevent ECE from functioning in an efficient, integrated manner. Ambiguity persists, for example, around the optimal relationship between the public and the private sectors; the degree to which ECE should and does function as part of the human services industry; the differentiated roles of the federal, state, and local governments with regard to the provision of ECE; and the viability of ECE as both a market commodity and a market good. Fundamental, these issues have not been systematically or comprehensively addressed. Without a broader conceptual framework, flavor-of-the-day practices, programs, and policies will independently proliferate and, we argue, make only piecemeal dents in improving ECE and its workforce. To that end, we recommend that the National Academy of Sciences, as the nation's most prestigious scientific body, establish a panel to reach greater conceptual clarity around systemic ECE issues. Distinguished from the above working group that is designed to address definitional clarity, this Panel must strive to achieve conceptual clarity.

- *GOAL 7: Enhance Data and Research Capacities about ECE Programs and Policies →*
- **○** *STRATEGY 7: Establish a Durable National Institute of Early Care and Education*

The data, the research, and the research capacity of ECE are, for all intents and purposes, moribund. Data that are collected are sparse and inconsistent; they do not pertain to the field at large, but to sub-segments of it; they are not collected with regular periodicity; they vary by state in accordance with state mandates; and, except for the National Household Education Survey (which is definitionally limited) and the Early Childhood Longitudinal Studies (which are cohort limited), national data that address the entire ECE workforce do not exist. To that end, we recommend the establishment of a publicly funded major National Institute of Early Care and Education (NIECE) akin to the National Institute for Child Health and Human Development. The NIECE would promote systematic inquiry and provide national data on critical issues pertaining to ECE. Its work would have three foci: (1) the collection of on-going surveys that report the status of ECE; (2) the initiating, funding, and oversight of "ahead of the curve" research that furthers the practice of ECE; and (3) econometric research related to the advancement of ECE.

- **○** *GOAL* 8: Build ECE Public Will for the Development of an ECE System
- ⇒ STRATEGY 8: Develop on Ongoing Public Information Campaign that Focuses on the Need for and Benefit of an ECE System.

The ECE field has been quite successful in using the media to advance overall public understanding of the importance of the early years and the contributions that high-quality ECE make to children's development in those years. Unfortunately, far less effort has been mobilized to advance the importance of an ECE system or ECE teachers. A fresh media approach should be launched to publicize the importance of developing an ECE system with a highly qualified workforce. As such, we recommend that a media campaign be launched in which a cadre of high-profile individuals (e.g., movie stars, corporate executives, policymakers), working in conjunction with the private sector, vocally and visibly emphasize and support ECE systemic and workforce issues. Such a campaign should have legs in that it moves the message to policy, and it should have durability in that it sustains the effort until measurable progress is made.

IN CONCLUSION

The challenges facing the ECE teaching workforce are not its alone, nor should they be understood as isolated challenges to specific programs, states, or populations. To the contrary, the challenges that beset American early care and education are widespread and historical in nature, exacerbated by decades of highly variegated policymaking. To achieve substantial reform, we must define, conceptualize, and act for American ECE as a whole. Piecemeal strategies and even piecemeal thinking can be helpful in discerning models and approaches. We have them; we know their benefits. Now is the time for infrastructure-building and workforce improvement. We must produce an approach to ECE that is characterized by quality and equality. To do anything less denies the intent of ECE: to enhance the development of *all* children regardless of the state in which they live, the program they attend, or the teacher delivering their early care and education.

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